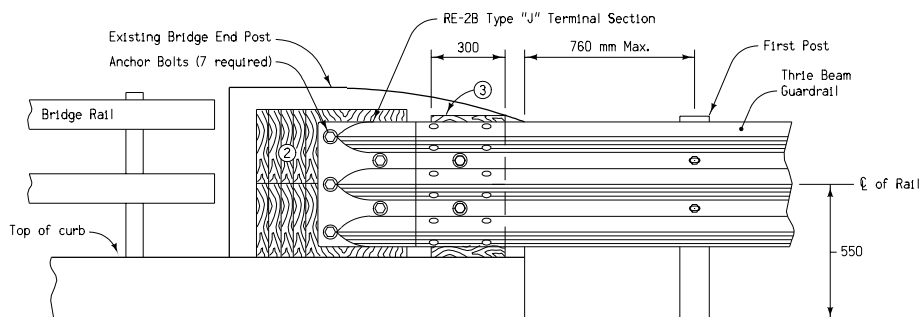
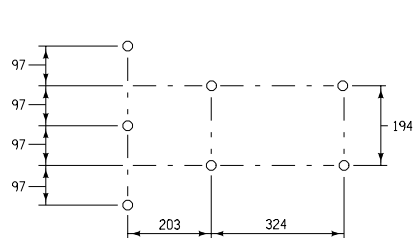


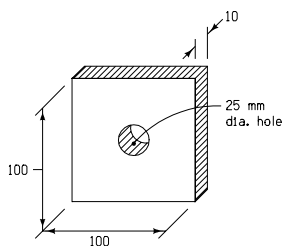
PLAN



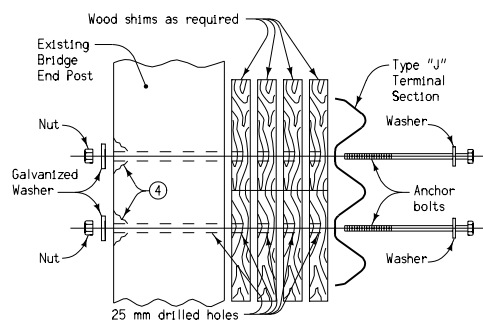
ELEVATION



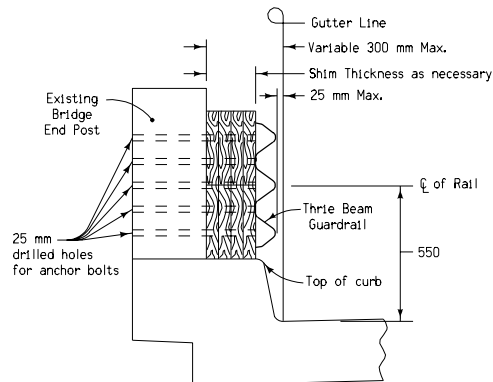
BOLT PATTERN
For RE-2B Type "J" Terminal Section



DETAIL OF GALVANIZED
STEEL WASHER



TYPICAL ATTACHMENT DETAIL



TYPICAL SECTION



LAPPING PROCEDURE

GENERAL NOTES:

Details shown hereon are for making a connection between approach guardrail and the bridge end post. This type may be used at either end of any bridge (one-way or two-way) having curbs less than 300 millimeters wide and end post construction as shown.

Refer to other appropriate Standard Road Plans and Detail Project Plans, including *Tabulation of Guardrail Installations*, for additional installation requirements. Exact details of the installation shall be as directed by the Engineer.

Horizontal and vertical alignment of guardrail in the area immediately adjacent to the bridge shall be adjusted to a smoothly curved line with no abrupt changes.

The anchor bolts shall conform to requirements of ASTM F-1554, Grade 55, threaded full length, and be galvanized. Threads may be chased after galvanizing. Washers shall conform to requirements of ASTM F-436M and be galvanized. Nuts shall conform to requirements of ASTM A-563M and be galvanized. These materials shall be galvanized in compliance with ASTM A-153M, Class C.

Treated wood shims to offset railing from end post may be required. Shims shall be installed as directed by the Engineer to align the face of rail to within 25 millimeters of the gutter line. Wood shall be treated in accordance with current Standard and Supplemental Specifications.

The price bid for "Guardrail, End Anchorage, Beam, RE-27B," each, shall be considered full compensation for furnishing all materials listed below and the construction of the end anchorage as detailed hereon.

LIST OF MATERIALS FOR THE RE-27B CONNECTION

- 7 - Approved 22 mm x sufficient length H.S. Hex Bolts.
- 7 - Approved Plain Washers, 24 millimeter, regular.
- 7 - Galvanized Steel Washers (100 mm x 100 mm x 10 mm)
- 7 - Approved 22 mm H.S. Hex Nuts.
- 1 - RE-2B Type "J" Terminal Section.

Sufficient treated plank shims, drilled and fitted as shown.

- ① When shim thickness is greater than 50 millimeters, a 45° taper will be required on the approach side.
- ② Wood shim - (2) 300 millimeter nominal width x 500 millimeter minimum length x variable thickness.
- ③ Wood shim - 300 millimeter nominal width x 575 millimeter length x variable thickness.
- ④ Area on back face spalled in drilling hole will be grouted before placement of washer for bolt installation. The grout shall consist of equal parts by weight of P.C.C. and concrete sand, mixed with sufficient water to form a paste.

All dimensions given in millimeters unless noted.

M	Iowa Department of Transportation	
	Highway Division	
	STANDARD ROAD PLAN	RE-27B
	REVISION: Change post size to 150mm X 200mm, edit general notes.	REVISION NO. 5
	APPROVED BY <i>William J. Sten</i> DESIGN/METHODS ENGINEER	REVISION DATE 10-02-01
DETAILS OF THRIE BEAM GUARDRAIL BRIDGE CONNECTION		